

What is claimed is:

1. A styrene resin composition comprising a linear polystyrene having a weight average molecular weight of 200,000 to 350,000 and a multibranched polystyrene having
5 a weight average molecular weight of 1,000,000 to 10,000,000, which has an average molecular weight of 250,000 to 700,000, and a melt mass-flow rate (MFR) and melt tension (MT) which satisfy formulas (1) and (2) respectively:

$$\text{MFR} \geq 45 \times \exp(-0.1 \times \text{Mw} \times 10^{-4}) \quad (1)$$

10 (wherein, MFR and Mw denote a melt mass-flow rate and a weight average molecular weight respectively for said styrene resin composition),

$$\text{MT} \geq 0.07\text{Mw} \times 10^{-4} + 1.8 \quad (2)$$

(wherein, MT and Mw denote a melt tension and a weight average molecular weight
15 respectively for said styrene resin composition).

2. A styrene resin composition according to claim 1, wherein said multibranched polystyrene comprises a branched structure containing electron attracting groups and tertiary carbon atoms in which 3 bonds other than a bond bonded to an electron attracting
20 group are all bonded to other carbon atoms.

3. A styrene resin composition according to claim 2, wherein a quantity of said electron attracting groups within said branched structure is within a range from 2.5×10^{-4} to 5.0×10^{-1} millimols per 1 g of said multibranched polystyrene.

4. A styrene resin composition according to claim 1, wherein said multibranched polystyrene is a copolymer of

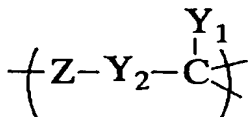
(A) a multibranched macromonomer having a branched structure containing electron attracting groups and tertiary carbon atoms in which 3 bonds other than a bond bonded to an electron attracting group are all bonded to other carbon atoms, and double bonds bonded directly to an aromatic ring, and

(B) styrene.

5. A styrene resin composition according to claim 4, wherein a degree of branching of said multibranched macromonomer is within a range from 0.3 to 0.8, and a quantity of said double bonds bonded directly to an aromatic ring is within a range from 0.1 to 5.5 millimols per 1 g of said multibranched macromonomer.

6. A styrene resin composition according to claim 4, wherein said multibranched macromonomer has a branched chain comprising a repeating unit represented by a general formula (I) shown below:

General formula (I)



[wherein, Y_1 denotes an electron attracting group selected from a group consisting of -CN, -NO₂, -CONH₂, -CON(R)₂, -SO₂CH₃, and -P(=O)(OR)₂ (wherein R denotes an alkyl group or an aryl group), Y_2 denotes an arylene group, -O-CO- or -NH-CO-, and Z denotes a group selected from a group consisting of -(CH₂)_nO-, -(CH₂CH₂O)_n-, and

$-(\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_n-$, providing that Y_2 is either $-\text{O}-\text{CO}-$ or $-\text{NH}-\text{CO}-$, Z denotes $-(\text{CH}_2)_n-$, $-(\text{CH}_2)_n\text{Ar}-$, $-(\text{CH}_2)_n\text{O}-\text{Ar}-$, $-(\text{CH}_2\text{CH}_2\text{O})_n-\text{Ar}-$, or $-(\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_n-\text{Ar}-$ (wherein Ar denotes an aryl group)].

- 5 7. A process for producing a styrene resin composition according to claim 1 by carrying out a radical polymerization of
 - (A) a multibranched macromonomer having a branched structure containing electron attracting groups and tertiary carbon atoms in which 3 bonds other than a bond connected to an electron attracting group are all bonded to other carbon atoms, and double bonds
 - 10 connected directly to an aromatic ring, and
 - (B) styrene.

8. A styrene resin composition according to claim 1, wherein said multibranched polystyrene comprises a branched structure containing a repeating structural unit selected
- 15 from a group consisting of ester linkages, ether linkages and amide linkages.

9. A styrene resin composition according to claim 8, which is a copolymer of
 - (A) a multibranched macromonomer having a branched structure containing a repeating structural unit selected from a group consisting of ester linkages, ether linkages and amide
 - 20 linkages, and double bonds at branch terminals, and
 - (B) styrene.

10. A styrene resin composition according to claim 9, wherein a degree of branching of said multibranched macromonomer is within a range from 0.3 to 0.8, and a quantity of

said double bonds at branch terminals is within a range from 0.1 to 5.5 millimols per 1 g of said multibranched macromonomer.

11. A process for producing a styrene resin composition according to claim 8 by carrying

5 out a radical polymerization of

(A) a multibranched macromonomer having a branched structure containing a repeating structural unit selected from a group consisting of ester linkages, ether linkages and amide linkages, and double bonds at branch terminals, and

(B) styrene.